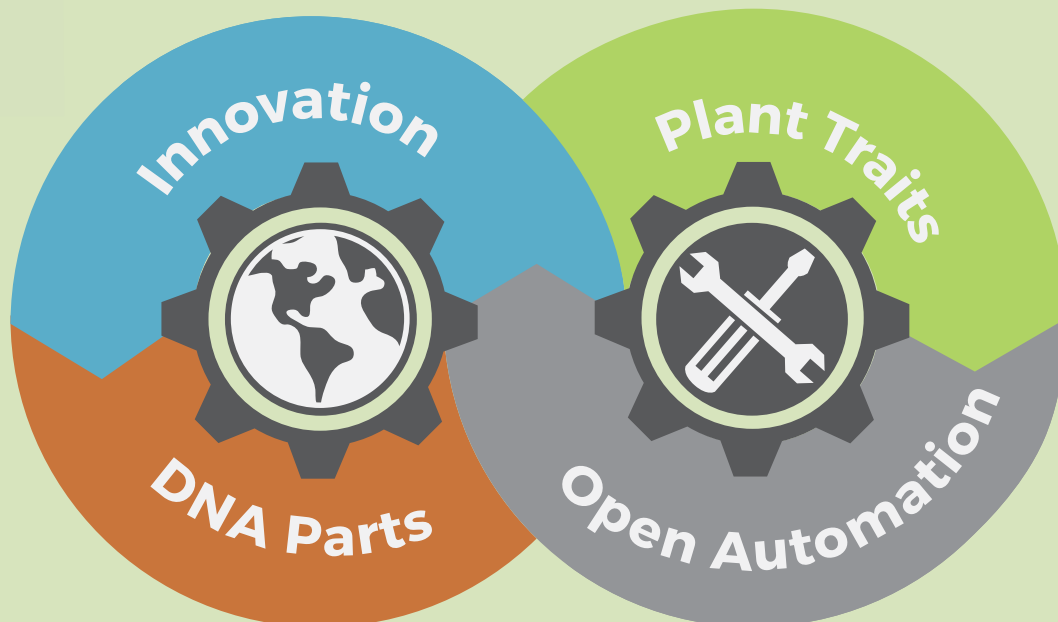




OpenPlant

Open technologies for plant synthetic biology



Outreach & Exchange



Research & Development



OpenPlant Fund

Supporting entrepreneurship and innovation. Promoting small scale interdisciplinary projects for research and new working practices in the plant synthetic biology community.



iGEM Plant Track

Promoting plant synthetic biology through the international synthetic biology student competition. Working alongside large projects tackling grand challenges in crop traits such as nitrogen fixation and C4 photosynthesis.



Open Materials Transfer Agreement

Enabling innovation by establishing a common syntax for plant DNA parts, and a legal framework for open international exchange of biological parts.



Open science hardware for science

Through funding (OpenPlant Fund, iGEM Hardware Track), training (with TReND Africa and Science Makers) and community building, to enable low-cost automation for plant applications.

Novel traits and applications

Creating novel plant applications, and engineering traits including photosynthesis, leaf structure, carbohydrate content, nitrogen fixation and metabolic engineering.

Marchantia as a simple plant testbed

Developing the liverwort *Marchantia polymorpha* as a facile model system for plant synthetic biology, with simple genome, culture, transformation, open form of development and access for quantitative analysis at the cellular scale.

Open DNA part library

Sharing and characterising an open part library for plants, algae and cyanobacteria including useful regulators, markers and enzymes.

Research automation

Integrating automation and open source control systems in OpenPlant research labs, improving low-cost custom instrumentation through 3D printing, microcontrollers, optics and software.

OpenPlant Partners:



Funded by:



Principal Contact:

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